

**Lane Construction  
Penobscot County  
Medway, Maine  
A-352-71-I-R**

**Departmental  
Findings of Fact and Order  
Air Emission License**

After review of the air emission license renewal application, staff investigation reports, and other documents in the applicant's file in the Bureau of Air Quality, pursuant to 38 M.R.S.A., Section 344 and Section 590, the Department finds the following facts:

**I. REGISTRATION**

**A. Introduction**

Lane Construction located in Medway, Maine has applied to renew their Air Emission License, permitting the operation of their crushed stone and gravel facility.

**B. Emission Equipment**

**Rock Crushers:**

<u>Designation</u>	<u>Powered</u>	<u>Process Rate (tons/hour)</u>	<u>Date of Manufacture</u>	<u>Control Device</u>
Primary	electrical	140	1970	Spray Nozzles
Secondary	electrical	140	1971	Spray Nozzles
Tertiary	electrical	140	1969	Spray Nozzles
Tertiary	electrical	140	1961	Spray Nozzles

**Diesel Unit:**

<u>Source ID</u>	<u>Max. Capacity</u>	<u>Max. Firing Rate</u>	<u>Power Output</u>
Generator Set #1	7.8 MMBtu/hr	56 gal/hr	500 kW

**C. Application Classification**

The application for Lane Construction does not include the licensing of increased emissions or the installation of new or modified equipment, therefore the license is considered a renewal of current licensed units only.

**II. BEST PRACTICAL TREATMENT**

In order to receive a license the applicant must control emissions from each unit to a level considered by the Department to represent Best Practical Treatment (BPT), as defined in Chapter 100 of the Bureau of Air Quality regulations.

BPT for existing emissions equipment means that method which controls or reduces emissions to the lowest possible level considering:

- the existing state of technology;
- the effectiveness of available alternatives for reducing emissions from the source being considered; and
- the economic feasibility for the type of establishment involved.

A. Diesel Engine

Generator Set #1 was manufactured prior to 1980. The fuel use in the diesel engine shall not exceed 75,000 gal/year of diesel fuel, based on a 12 month rolling total, with a maximum sulfur content of 0.5% by weight and is therefore considered to be receiving BPT.

A summary of the BPT analysis for each of the pollutants is discussed below:

1. Chapter 106 regulates fuel sulfur content, however the use of 0.5% sulfur by weight fuel is more stringent and shall be used.
2. SO<sub>2</sub> emission data was based on fuel sulfur mass balance.
3. PM and PM<sub>10</sub> emission rates were based upon the requirements of MEDEP Chapter 103.
4. NO<sub>x</sub>, CO and VOC emission rates were based upon AP-42 data dated 10/96 for diesel engines greater than 600 hp.
5. Opacity from the diesel engine shall not exceed 30% on a six (6) minute block average basis, except for two (2) six (6) minute block averages in a 3-hour period.

B. Rock Crushers

The Primary Rock Crusher is a portable unit manufactured in 1970 with a rated capacity of 140 tons/hr. The Secondary Rock Crusher is a portable unit manufactured in 1971 with a rated capacity of 140 tons/hr. Tertiary Rock Crusher #1 is a portable unit manufactured in 1969 and Tertiary Rock Crusher #2 is a portable unit manufactured in 1961; each have a rated capacity of 140 tons/hr. EPA New Source Performance Standards (NSPS) Subpart OOO for Nonmetallic Mineral Processing Plants applies to fixed rock crushers with capacities greater than 25 tons/hr and portable rock crushers with capacities greater than 150 tons/hr, constructed after August 31, 1983. Therefore, the Primary, Secondary and Tertiary rock crushers are not subject to NSPS Subparts A and OOO.

A summary of the BPT analysis for particulate matter is discussed below:

Particulate emissions from the rock crushers is considered to be generally unquantifiable. Therefore, opacity is the proposed means of demonstrating

compliance for the crushers and they shall be limited to 10% on a six (6) minute block average basis. Lane shall maintain and operate water sprays as needed for particulate control on the rock crushers to remain below the 10% opacity limit.

C. Stock Piles and Roadways

BPT for all potential sources of fugitive PM emissions, including material stockpiles and roadways, shall be controlled by wetting with water, with calcium chloride, or other methods as approved by the Bureau of Air Quality to prevent visible emissions in excess of 20 percent, except for no more than five (5) minutes in any 1-hour period.

D. Facility Emissions

Based on the total use of 75,000 gallons per year of diesel fuel (12 month rolling total) with a sulfur content not to exceed 0.5% by weight for the generator, the total annual emissions for the facility are as follows:

**Total Annual Emissions for the Facility**  
(used to calculate the annual license fee)

<b>Pollutant</b>	<b>Tons/year</b>
PM	0.6
PM <sub>10</sub>	0.6
SO <sub>2</sub>	2.6
NO <sub>x</sub>	16.6
CO	4.4
VOC	0.5

**III. AMBIENT AIR QUALITY ANALYSIS**

According to the Maine Regulations Chapter 115, the level of air quality analyses required for a renewal source shall be determined on a case-by-case basis. Based on the information available in the file, Lane Construction is below the emissions level required for modeling and monitoring.

**ORDER**

Based on the above Findings and subject to conditions listed below the Department concludes that the emissions from this source:

- will receive Best Practical Treatment,
- will not violate applicable emission standards,
- will not violate applicable ambient air quality standards in conjunction with emissions from other sources.

The Department hereby grants Air Emission License A-352-71-I-R subject to the following conditions:

- (1) Employees and authorized representatives of the Department shall be allowed access to the licensee's premises during business hours, or any time during which any emissions units are in operation, and at such other times as the Department deems necessary for the purpose of performing tests, collecting samples, conducting inspections, or examining and copying records relating to emissions (Title 38 MRSA §347-C).
- (2) The licensee shall acquire a new or amended air emission license prior to commencing construction of a modification, unless specifically provided for in Chapter 115. [MEDEP Chapter 115]
- (3) Approval to construct shall become invalid if the source has not commenced construction within eighteen (18) months after receipt of such approval or if construction is discontinued for a period of eighteen (18) months or more. The Department may extend this time period upon a satisfactory showing that an extension is justified, but may condition such extension upon a review of either the control technology analysis or the ambient air quality standards analysis, or both. [MEDEP Chapter 115]
- (4) The licensee shall establish and maintain a continuing program of best management practices for suppression of fugitive particulate matter during any period of construction, reconstruction, or operation which may result in fugitive dust, and shall submit a description of the program to the Department upon request. [MEDEP Chapter 115]
- (5) The licensee shall pay the annual air emission license fee to the Department, calculated pursuant to Title 38 M.R.S.A. §353. [MEDEP Chapter 115]
- (6) The license does not convey any property rights of any sort, or any exclusive privilege. [MEDEP Chapter 115]
- (7) The licensee shall maintain and operate all emission units and air pollution systems required by the air emission license in a manner consistent with good air pollution control practice for minimizing emissions. [MEDEP Chapter 115]
- (8) The licensee shall maintain sufficient records to accurately document compliance with emission standards and license conditions and shall maintain such records for a minimum of six (6) years. The records shall be submitted to the Department upon written request. [MEDEP Chapter 115]

- (9) The licensee shall comply with all terms and conditions of the air emission license. The filing of an appeal by the licensee, the notification of planned changes or anticipated noncompliance by the licensee, or the filing of an application by the licensee for a renewal of a license or amendment shall not stay any condition of the license. [MEDEP Chapter 115]
- (10) The licensee may not use as a defense in an enforcement action that the disruption, cessation, or reduction of licensed operations would have been necessary in order to maintain compliance with the conditions of the air emission license. [MEDEP Chapter 115]
- (11) In accordance with the Department's air emission compliance test protocol and 40 CFR Part 60 or other method approved or required by the Department, the licensee shall [MEDEP Chapter 115]:
  - (i) perform stack testing to demonstrate compliance with the applicable emission standards under circumstances representative of the facility's normal process and operating conditions:
    - a. within sixty (60) calendar days of receipt of a notification to test from the Department or EPA, if visible emissions, equipment operating parameters, staff inspection, air monitoring or other cause indicate to the Department that equipment may be operating out of compliance with emission standards or license conditions; or
    - b. pursuant to any other requirement of this license to perform stack testing.
  - (ii) install or make provisions to install test ports that meet the criteria of 40 CFR Part 60, Appendix A, and test platforms, if necessary, and other accommodations necessary to allow emission testing; and
  - (iii) submit a written report to the Department within thirty (30) days from date of test completion.
- (12) If the results of a stack test performed under circumstances representative of the facility's normal process and operating conditions indicate emissions in excess of the applicable standards, then [MEDEP Chapter 115]:
  - (i) within thirty (30) days following receipt of such test results, the licensee shall re-test the non-complying emission source under circumstances representative of the facility's normal process and operating conditions and in accordance with the Department's air emission compliance test protocol and 40 CFR Part 60 or other method approved or required by the Department; and
  - (ii) the days of violation shall be presumed to include the date of stack test and each and every day of operation thereafter until compliance is demonstrated under normal and representative process and operating conditions, except to the extent that the

facility can prove to the satisfaction of the Department that there were intervening days during which no violation occurred or that the violation was not continuing in nature; and

- (iii) the licensee may, upon the approval of the Department following the successful demonstration of compliance at alternative load conditions, operate under such alternative load conditions on an interim basis prior to a demonstration of compliance under normal and representative process and operating conditions.
- (13) Notwithstanding any other provisions in the State Implementation Plan approved by the EPA or Section 114(a) of the CAA, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any statute, regulation, or Part 70 license requirement. [MEDEP Chapter 115]
- (14) The licensee shall maintain records of malfunctions, failures, downtime, and any other similar change in operation of air pollution control systems or the emissions unit itself that would affect emission and that is not consistent with the terms and conditions of the air emission license. The licensee shall notify the Department within two (2) days or the next state working day, whichever is later, of such occasions where such changes result in an increase of emissions. The licensee shall report all excess emissions in the units of the applicable emission limitation. [MEDEP Chapter 115]
- (15) Upon written request from the Department, the licensee shall establish and maintain such records, make such reports, install, use and maintain such monitoring equipment, sample such emissions (in accordance with such methods, at such locations, at such intervals, and in such a manner as the Department shall prescribe), and provide other information as the Department may reasonably require to determine the licensee's compliance status. [MEDEP Chapter 115]
- (16) **Rock Crushers**
- A. Visible emissions from the crushers shall be limited to no greater than 10% opacity on a six minute block average. Lane shall operate and maintain spray nozzles as needed for particulate control on all rock crushers to remain below the 10% opacity limit.  
[MEDEP Chapter 101]
  - B. Lane shall maintain a log detailing any maintenance on the water spray nozzles. The maintenance log shall be located at the facility whenever the facility is in operation.  
[MEDEP Chapter 115, BPT]

C. Lane shall maintain a log detailing and quantifying the hours of operation on a daily basis for all of the rock crushers. The operation log shall be located at the facility whenever the facility is in operation.

[MEDEP Chapter 115, BPT]

D. The rock crushers shall not be attached or clamped via cable, chain, turnbuckle, bolt, or other means (except electrical connections) to any anchor, slab, or structure (including bedrock) that must be removed prior to transportation.

[40 CFR Part 60, Subpart OOO]

(17) **Diesel Engine**

A. Fuel use in Generator Set #1 shall not exceed 75,000 gal/year of diesel fuel (12 month rolling total), with a sulfur content not to exceed 0.5% by weight. Fuel use records and receipts (showing the quantity and percent sulfur of the fuel) for the diesel engines shall be maintained to demonstrate compliance.

[MEDEP Chapter 115, BPT]

B. Emissions from Generator Set #1 shall be limited to the following [MEDEP Chapter 115, BPT]:

<u>Pollutant</u>	<u>lb/MMBtu</u>	<u>lb/hr</u>
PM	0.12	0.94
PM <sub>10</sub>	n/a	0.94
SO <sub>2</sub>	n/a	3.98
NO <sub>x</sub>	n/a	24.96
CO	n/a	6.63
VOC	n/a	0.78

C. Visible emissions from Generator Set #1 shall not exceed 30% on a six (6) minute block average basis, except for two (2) six (6) minute block averages in a 3-hour period.

[MEDEP Chapter 101]

(18) **Stockpiles and Roadways**

Visible emissions from a fugitive emission source shall not exceed an opacity of 20 percent, except for no more than five (5) minutes in any 1-hour period. Compliance shall be determined by an aggregate of the individual fifteen (15)-second opacity observations which exceed 20 percent in any one (1) hour.

[MEDEP Chapter 101]

(19) **Equipment Relocation** [MEDEP Chapter 115, BPT]

- A. Lane shall notify the Bureau of Air Quality, by a written notification at least 10 days in advance, prior to relocation of any equipment carried on this license. The notification shall be sent to:

Attn: Relocation Notice  
Maine DEP  
Bureau of Air Quality  
17 State House Station  
Augusta, ME 04333-0017

The notification shall include the address of the equipment's new location and the license number pertaining to the relocated equipment.

- B. Written notification shall also be made to the municipality where the equipment will be relocated, except in the case of an unorganized territory where notification will be made to the respective county commissioners.

(20) Lane shall keep a copy of this Order on site, and have the operator(s) be familiar with the terms of this Order.

[MEDEP Chapter 101]

(21) Lane shall pay the annual air emission license fee within 30 days of **December 30th** of each year. Pursuant to 38 MRSA §353-A, failure to pay this annual fee in the stated timeframe is sufficient grounds for revocation of the license under 38 MRSA §341-D, subsection 3.

[38 MRSA §353-A]

(22) The term of this order shall be for five (5) years from the signature date below.

[MEDEP Chapter 115, BPT]

DONE AND DATED IN AUGUSTA, MAINE THIS \_\_\_\_\_ DAY OF \_\_\_\_\_ 2003.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: \_\_\_\_\_  
DAWN R. GALLAGHER, COMMISSIONER

PLEASE NOTE THE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: September 24, 2003

Date of application acceptance: October 6, 2003

Date filed with the Board of Environmental Protection \_\_\_\_\_

This order prepared by Mark E. Roberts, Bureau of Air Quality